

Economic Analysis of Solar Energy Using in Oil Sector Economy in Republic of Tatarstan

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Abstract

© Published under licence by IOP Publishing Ltd. In the current economic conditions further increase of the profit or maintenance of its current level on the base of extensive development factors is no longer possible. The example of the oil-extracting company in the Republic of Tatarstan demonstrates that in the future it will be possible to replace traditional energy sources with solar energy; it will reduce energy costs for oil extraction, production costs and provide an increase of corporate efficiency. The economic analysis results show that the use of solar electricity can lead to 4.68% reduction in total electricity costs. In addition, the energy consumption per ton of oil produced is reduced. The share of electricity costs in the oil cost is reducing from 12.13% to 11.56%. Consequently, in the long term, the impact of total energy costs reduction can become more significant. In this way solar energy can become quite a real alternative in ensuring the energy needs of the economy of the oil-extracting sector of the Republic of Tatarstan and become a driver of intensive economic development.

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